

Under the Paperwork Reduction Act of 1995, no persons are required to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	unassigned
				Filing Date	Filed Herewith
				First Named Inventor	John Jianhua Chen
				Group Art Unit	unassigned
				Examiner Name	unassigned
Sheet	1	of	3	Attorney Docket Number	04-0048

Examiner Initials*	Cite No. 1	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Class/Subclass		
/C.A./	1	6,406,457 B1	604/96.01	Wang et al.	06-18-2002
	2	2001/0046564 A1	427/430.1	Kotov	11-29-2001
	3	2002/0037383 A1	428/36.91	Spillman	03-28-2002
	4	2002/0061326 A1	424/424	Li et al.	05-23-2002
	5	2003/0065355 A1	606/200	Weber	04-03-2003
	6	2003/0093107 A1	606/194	Parsonage et al.	05-15-2003
	7	2003/0157260 A1	427/402	Rubner et al.	08-21-2003
	8	2003/0175517 A1	428/402.2	Voigt et al.	09-18-2003
	9	2003/0219909 A1	436/518	Lally et al.	11-27-2003
/C.A./	10	2004/0023317 A1	435/14	Motamedi et al.	02-05-2004

Examiner Initials*	Cite No. 1	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYYY	T
		Office ²	Number ⁴	Class/Subclass			
/C.A./	1	WO	99/47252	B01J 13/00	Lerche Karl Heinz (DE) et al.	09-23-1999	
/C.A./	2	WO	03/103854 A1	B05D 1/18, B01D 3/00	Nicholas A. Kotov (US) et al.	06-06-2003	
/C.A./	3	WO	00/44507	B05D 1/14, 3/00, G11B 5/62	Nicholas A. Kotov (US) et al.	08-03-2000	

Examiner Signature	/Carlos Azpuru/	Date Considered	09/02/2008
-----------------------	-----------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

²Unique citation designation number. *Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	unassigned
		Filing Date	Filed Herewith
		First Named Inventor	John Jianhua Chen
		Group Art Unit	unassigned
		Examiner Name	unassigned
Sheet	2	of	3
		Attorney Docket Number	04-0048

OTHER PRIOR ART—NON-PATENT LITERATURE DOCUMENTS			
Examin or Initials ¹	Cite No. ²	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ³
/C.A./	A1	CHUNG, A.J. AND RUBNER, M.F., Methods of Loading and Releasing Low Molecular Weight Cationic Molecules in Weak Polyelectrolyte Multilayer Films, <i>Langmuir</i> 2002, 18, 1176-1183.	
	A2	FRANK CARUSO et al., Microencapsulation of Uncharged Low Molecular Weight Organic Materials by Polyelectrolyte Multilayer Self-assembly, <i>Langmuir</i> 2000, 16, 8932-8936	
	A3	GI-RA, YI et al., Ordered Macroporous Particles by Colloidal Templating, <i>Chem. Mater.</i> 2001, 13, 2613-2618	
	A4	SHCHUKIN, D.G. et al., Micron-Scale Hollow Polyelectrolyte Capsules with Nanosized Magnetic Fe ₃ O ₄ Inside, <i>Materials Letters</i> 57, 1743-1747, 2003.	
	A5	RADTCHENKO, I.L. et al., A Novel Method for Encapsulation of Poorly Water-soluble Drugs: Precipitation in Polyelectrolyte Multilayer Shells, <i>International Journal of Pharmaceutics</i> , 242, 219-223 (2002).	
	A6	RADTCHENKO, I.L. et al., Assembly of Alternated Multivalent Ion/Polyelectrolyte Layers on Colloidal Particles. Stability of the Multilayers and Encapsulation of Macromolecules into Polyelectrolyte Capsules, <i>Journal of Colloid and Interface Science</i> , 230, 272-280 (2000)	
	A7	WHAU, WINKY L. et al., Surface-chemistry technology for microfluidics, <i>J. Micromech. Microeng.</i> 13 (2003) 272-278	
	A8	RADTCHENKO et al., Incorporation of macromolecules into polyelectrolyte micro and nanocapsules via surface controlled precipitation on colloidal particles, <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> 202 (2002) 127-133.	
	A9	MOYA, S. et al., Polyelectrolyte multilayer capsules templated on biological cells: core oxidation influences layer chemistry, <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> 183-185 (2001) 27-40.	
/C.A./	A10	ANTIPOV, ALEXEI A. ET AL., Polyelectrolyte multilayer capsule permeability control, <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> 198-200 (2002) 535-541	

Examiner Signature	/Carlos Azpuru/	Date Considered	09/02/2008
-----------------------	-----------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO			Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Application Number	unassigned	
			Filing Date	Filed Herewith	
			First Named Inventor	John Jianhua Chen	
			Group Art Unit	unassigned	
			Examiner Name	unassigned	
Sheet	3	of	3	Attorney Docket Number	04-0048

/C.A./	A11	QIU, XINGPING et al., Studies on the Drug Release Properties of Polysaccharide Multilayers Encapsulated Ibuprofen Microparticles, <i>Langmuir</i> 2001, 17, 5375-5380
	A12	ANTIPOV, ALEXEI A. et al., Sustained Release Properties of Polyelectrolyte Multilayer Capsules, <i>J. Phys. Chem. B</i> 2001, 105, 2281-2284, October 27, 2000
	A13	http://www.bmed.mcgill.ca/fabrizian/People_pages/Benjamin2.htm#cCOMMUNICATIONS , THIERRY, BENJAMIN, Development of new strategies for endovascular revascularization procedures, 1-7, date unknown but before the filing of this application
	A14	https://engineering.purdue.edu/BME/Seminars/2003/july_14.html , Graduate Seminar, Stent coating for drug delivery: Coating polymeric micelles using polyelectrolytes Purdue University Biomedical Engineering Seminar, 2003, 1-2, July 14, 2003
	A15	http://www2.latech.edu/~ylvov/research/research.htm , LVOV, YURI M., Nanofabrication of ordered multilayers by alternate absorption of polyions, nanoparticles and proteins: From planar films to microtemplates, Institute for Micromanufacturing, LaTech, Ruston, LA 71272, pp. 1-13, date unknown but before the filing of this application.
	A16	POMMERSHEIM, RAINER; SCHREZENMEIR, JURGEN; VOGT, WALTER. "Immobilization of enzymes by multilayer microcapsules" <i>Macromol. Chem. Phys.</i> Vol. 195. 1994. pp 1557-1567.
	A17	RILLING, P.; POMMERSHEIM, WALTER R.; VOGT, W. "Encapsulation of cytochrome C by multilayer microcapsules. A model for improved enzyme immobilization". <i>Journal of Membrane Science</i> Vol. 129. 1997. pp. 283-287.
	A18	SUKHORUKOV, GLEB B.; SHCHUKIN, DMITRY G.; DONG, WEN-FEI; MOHWALD, HELMUT; LULEVICH, VALENTIN V.; VINOGRADOVA, OLGA I. "Comparative Analysis of Hollow and Filled Polyelectrolyte Microcapsules Templated on Melamine Formaldehyde and Carbonate Cores". <i>Macromol. Chem. Phys.</i> 2004. Vol. 205. pp. 530-535
	A19	SASTRY, MURALI; KUMAR, ASHAVANI; DATAR, SUVARNA; DHARMADHIKARI, C.V.; GANESH, KRISHNA N. "DNA-mediated electrostatic assembly of gold nanoparticles into linear arrays by a simple drop-coating procedure". <i>Applied Physics Letters</i> . Vol. 78, No. 19. May 7, 2001. pp. 2943-2945.
↓ /C.A./	A20	MAMEDOV, ARIF A.; KOTOV, NICHOLAS A.; PRATO, MAURIZIO; GULDI, DIRK M.; WICKSTED, JAMES P.; HIRSCH, ANDREAS. "Molecular design of strong single-wall carbon nanotube/polyelectrolyte multilayer composites". <i>Nature Publishing Group</i> . November 2002. Vol. 1. pp. 190-194.

Examiner Signature	/Carlos Azpuru/	Date Considered	09/02/2008
--------------------	-----------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹²Unique citation designation number. *Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.